

ABSTRACT OF THE DISCLOSURE

A dimensionally stable and growth controlled inflatable member formed by adding a multifunctional agent to a soft polymer to form a compound, extruding an inflatable member from the compound, and cross-linking the compound. The inflatable member is configured to be formed-in-place with a body lumen. Preferably, the inflatable member is blown to a working diameter prior to use and then heated to the glass transition temperature of the polymer to shrink the diameter of the blown inflatable member back to about the nominal diameter of the tubing. In another embodiment, the invention is a dimensionally stable and growth controlled inflatable member comprising longitudinal zones of crosslinked material symmetrically spaced about the circumference of the inflatable member and a uniform working diameter. Preferably, there are three or more longitudinal zones that run the working length of the inflatable member. The selectively irradiated inflatable members are formed in a mold having symmetrically spaced longitudinal windows.